



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590  
**AUG 29 2001**

DOT-E 7954  
(FIFTEENTH REVISION)

EXPIRATION DATE: September 30, 2002

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Air Products & Chemicals, Inc.  
Allentown, PA

(See Appendix A to this exemption for a list of additional grantees)

2. PURPOSE AND LIMITATION: This exemption authorizes the transportation in commerce of certain compressed gases in manifolded DOT specification cylinders. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.301(d)(2) in that manifolding is authorized for the cylinders in paragraph 7(a) containing the materials described in paragraph 6, and § 173.302(a)(3) in that DOT 3AAX specification cylinders are authorized for the materials listed in paragraph 6.
5. BASIS: This exemption is based on the application of Air Products and Chemicals, Inc. dated February 21, 2001, and supplementary information dated June 18, 2001, submitted in accordance with § 107.105 and the public proceedings thereon.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Compressed gas, n.o.s.-- (contains Fluorine <sup>1</sup> ) (less than 3.7 percent)	2.2	UN1956	None
Compressed gas, toxic, oxidizing, corrosive, n.o.s. -- (contains Fluorine <sup>1</sup> ) (from 3.7 to less than 21.5 percent) (Hazard Zone will be determined in accordance with the latest edition CGA Pamphlet P20)	2.3	UN3306	None
Nitrogen trifluoride, compressed	2.2	UN2451	None

<sup>1</sup>Balance gases consist of: nitrogen (N<sub>2</sub>), argon (Ar), helium (He), neon (Ne) or krypton (Kr).

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are DOT Specification 3A2400, 3AAX2400 or 3AA2400 cylinders in manifolded arrangement.

b. Each cylinder must be equipped with a pressure relief device consisting of a combination rupture disc-fusible plug at each end complying with the requirements of § 173.34(d). The rated burst pressure of the rupture disc must be 3,775 psig and the fusible plug has a nominal yield temperature of 165°F.

c. Each cylinder must be equipped with an individual shut-off valve, which must be kept tightly closed while in transit. The design must be such that there can be no interchange of container contents during transportation.

d. The manifold piping must be equipped with a manual shut-off valve suitable for fluorine/nitrogen service, having a leak-tight cap on the valve outlet at the termination of the piping.

e. Manifold branch lines to these individual shut-off valves must be sufficiently flexible to prevent damage to the valves which otherwise might result from the use of rigid branch lines.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. Drivers and the master of a vessel used to transport packages under this exemption must have been instructed as to necessary safeguards and proper procedure in the event of unusual delay, fire, or accident.

d. When transported by cargo vessel, packages which contain gas mixtures consisting of 3.7 percent or more fluorine must be stowed on deck only. These packages must be stowed "away from" living quarters, foodstuffs, and readily combustible organic materials.

e. MARKING - Each motor vehicle must be plainly marked on the right side near the front in letters at least two inches high on a contrasting background, "DOT-E 7954."

f. PLACARDING - Shipments made under the provisions of this exemption must be placarded: (1) with Division 2.2 and Division 5.1 placards for gas mixtures containing less than 3.7 percent of fluorine, and (2) with Division 2.3, Division 5.1 and Class 8 placards for gas mixtures containing 3.7 percent to less than 21.5 percent of fluorine.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel used to transport packages covered by this exemption.11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

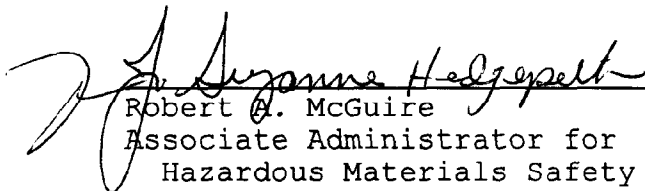
- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incidents involving the package and shipments made under the terms of this exemption.

Issued at Washington, D.C.:

  
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

AUG 29 2001  
(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590.  
Attention: DHM-31.

The original of this exemption is on file at the above office. Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

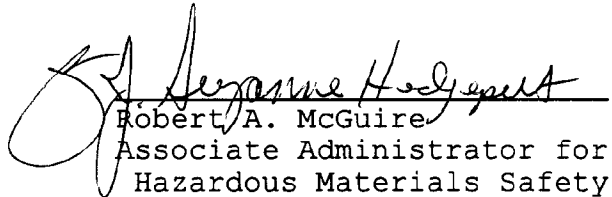
Copies of exemptions may be obtained from the AAHMS, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-001, Attention: Records Center, 202-366-5046.

PO: KFWong/alb

**AUG 29 2001**

The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

<b>Company Name City/State</b>	<b>Application Date</b>	<b>Issue Date</b>	<b>Expiration Date</b>
Advanced Technology Materials, Inc. Danbury, CT	Dec 22, 2000	Jan 22, 2001	Sep 30, 2002
BOC Gases Murray Hill, NJ	Nov 1, 2000	Nov 21, 2000	Sep 30, 2002



Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety